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ABSTRACT

Included in the articles and documents in this annotated bibliography are definitions of futurism, discussions of the background and applications of futurism, and examinations of some futurist writings. Some articles and documents are based in the present and discuss relatively conventional approaches to determining what is to be done to eet the needs of future. All 21 of the documents are in the LaIC system. (Author)



The Best of ERIC presents annotations of ERIC liter-

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ature on important topics in educational management.

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This bibliography was prepared by the ERIC Clearinghouse on Educational Management for distribution by the Association of California School Administrators



Barnes, Ron. Learning Systems for the Future. Fastback Series. No. 9. Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1972. 38 pages. ED 073 566 Document not available from EDRS. (Available from Phi Delta Kappa, Eighth and Union, Box 789, Bloomington, Indiana 47401, \$0,50; set of six, \$2.00; quantity and membership discounts.)

Clearinghouse on Educational Management

The Best of

Barnes envisions a new kind of learning system for the future. Based on ideas developed for the Minnesota Experimental City project, the system operates on a number of assumptions that distinguish it from current systems. For instance, it considers that teaching what is known is training and is a teacher-centered activity, whereas learning is a learnercentered process in which the learner deals with the unknown,

The system also seeks to redefine when learning takes place (throughout life), where (everywhere in the community), and who can help a person learn (everyone). This is a suggestion for an entirely new way of looking at learning and teaching rather than a proposal for changing the current methods.

Berghofer, Desmond E. "Education and the Future." Orbit, 4, 1 (February 1973), pp. 9-11, EJ 081 058,

In this introductory-level article, Berghofer discusses why educators (and others) must consider the future and what some futurists have written. He reviews the thoughts of Polak. Mumford, Toffler, Brinkhurst and Chant, Forrester, and Meadows. The last four authors are concerned with problems related to man and the environment.

Burdin, Joel L. Futurism: A Needed Process in School Personnel Preparation. East Lansing, Michigan: Michigan State University, 1970. 31 pages. ED 036 497 MF \$0.75 HC \$1.85,

In this exploratory paper Burdin projects present trends and capabilities into the future and suggests their implications for education. The main body of the paper is made up of 18 charts, each focusing on a societal trend and examining consequences, educational outcomes, impact on school personnel, impact on preparation programs, and illustrative responses, These charts show concretely the impact of social changes on teachers and teacher trainers.

In his synthesizing discussion Burdin makes the point that we cannot leave the future to random experimentation or to chance. He is concerned that reactions to change be consistent with democratic values and processes,

Depenham, Jerry, "A Computerized Simulation Game for Studying the Future of American Education." Educational Icchnology, 14, 2 (February 1974), pp. 14-19, EJ 094 869.

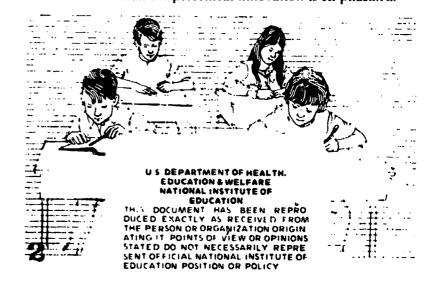
SAFE (Simulating Alternative Futures in Education) is a computer game being used in education courses at the University of Utah. Debenham is careful to emphasize that the game does not attempt to predict real educational developments of the future or their impact on society, but is used as a tool for stretching the imagination of the players.

The game focuses on the interplay of five basic elements: district innovation planning committees, general proposals for change in the educational system, general classes of social developments, sociopolitical groups representing alternative viewpoints, and social indicators of satisfaction with the educational system.

Educational Inquiry, Inc. Schooling for the Future: Toward Quality and Equality in American Precollegiate Education. Los Angeles: 1971. 609 pages, ED 058 497 MF \$1.05 HC \$29.40.

The first part of this comprehensive, informative, and readily accessible report on education and change is a brief presentation of the total report's arguments, proposals, and recommendations. The second part is made up of four task force reports. Occasional cross-references in the first part make it relatively easy to find the more extensive discussion on a particular point in the second part.

The need for a comprehensive design for change in the schools rather than for piecemeal innovation is emphasized.





Goldman, Samuel. "Futurists" in Education. In-Service Program for CERLI Staff, 1968-69. Final Report. Northfield, Illinois: Cooperative Educational Research Laboratory, Inc., 1969. 54 pages. ED 036 883 MF \$0.75 HC \$3.15.

The Cooperative Educational Research Laboratory, Inc. (CERLI) inservice program was designed to help the staff of the regional laboratory initiate effective programs aimed at the future. The forty pages of appendixes are the most informative parts of the paper. They contain material produced by the participants, including a chart of future events, preliminary attempts at scenario development, and an annotated bibliography.

Gresham. Robert L., and others. *The Albuquerque Story.* Future Abools Study Project. Final Report. Albuquerque, New Mexico: Albuquerque Public Schools, 1970. 157 pages. ED 043 949 MF \$0.75 HC \$7.80.

This is the final report of a three-year study to determine the steps the Albuquerque schools should take to meet the needs of the community in the period 1975-2000. Its basic content covers the project's activities and recommendations, evaluation of the project, and implementation proposals.

The report suffers from the limitations peculiar to a report on one area's attempts to meet its particular problems, but it also has the strength of that kind of report: it deals with the practical problems that arise in a community when its school district attempts to deal with the future.



Lahav, Ron. "Futurology and Education: Four Futurologists and Their Theories of Education." Journal of Educational Thought, 7, 1 (April 1973), pp. 48-64. EJ 078 647.

Lahav presents the views of four futurologists—Buckminster Fuller, Jacques Ellul, Herman Kahn, and Alvin Toffler (whom Lahav refers to as a publicist more than a futurologist). His argument is that people in charge of planning for the schools need to develop a systematic vision of the future to use in guiding their statistical projections.

Lahav's discussion of the futurologists is lucid and evaluative. This is a good introductory work.

Leeper, Robert R., editor. A Man for Tomorrow's World. Papers presented at Association for Supervision and Curriculum Development annual conference, San Francisco, March 1970. Washington, D.C.: Association for Supervision and Curriculum Development, 91 pages. ED 072 533 MF \$0.75 HC not available from EDRS. (Available from Association for Supervision and Curriculum Development, 1701 K Street NW, Washington, D.C. 20006. Stock Number 611-17838, \$2.25.)

This is a "consciousness raising" publication in the sense

that the addresses and papers in it focus on the present and urge readers to consider what needs to be done to prepare for the future. Samuel Proctor, Alexander Frazier, and Theodore Rozak gave the talks.

Two official papers adopted for study and action are also included. One assesses the quality of life and society in this country; the other outlines the general theme for the ASCD programs: The Generation of New Understandings.

Marien, Michael D. Alternative Futures for Learning: An Annotated Bibliography of Trends, Forecasts, and Proposals. Syracuse, New York: Educational Policy Research Center, Syracuse University Research Corporation, 1971. 242 pages. ED 071 998 MF \$0.75 HC \$11.40. (Also available from EPRC Publications, Educational Policy Research Center, 1206 Harrison Street, Syracuse, New York 13210. \$5.00.)

This annotated, selected bibliography lists 936 items of futures literature. A helpful foreword provides an introduction to the literature, and extensive indexing allows ready access to works.

Meinert, Roland G. "Futures Forecasting." Social Work, 18, 6 (November 1973), pp. 48-51. EJ 085 742.

Meinert's article is designed to introduce the subject of futurism to social workers. The information is also useful to educators who seek a basic understanding of futurist techniques so they can make their own evaluations of futurist research. Four methods of futures forecasting extrapolation, the Delphi technique, simulation, and scenario speculation are described. Meinert gives examples of the techniques and raises questions about the drawbacks and limitations inherent in each technique.

Morphet, Edgar L., and Jesser, David L., editors. *Designing Education for the Future: Rationale, Procedures and Appraisal. Final Report and External Evaluation.* Denver: 1969. 161 pages. ED 035 078 MF \$0.75 HC \$7.80.

Long final reports are often hard to read but informative. Such is the case with this report. The Designing Education for the Future project attempted to help eight western states learn to anticipate the changes that will take place in the country during a 10- to 15 year period and to develop responses to those changes.

One section gives information about each participating state's procedures and accomplishments and presents the conclusions and recommendations of participants in each state. This section and that on external evaluation may be of special interest.

Organisation for Economic Cooperation and Development. Alternative Educational Futures in the United States and in Europe: Methods, Issues and Policy Relevance. Proceedings of Conference on Policies for Educational Growth, Paris, France, June 1970. Paris, France: Centre for Educational Research and Innovation, 1972. 195 pages. ED 972 508 MF \$0.75 HC \$9.00. (Also available from OECD Publications Center, Suite 1207, 1750 Pennsylvania Avenue NW, Washington, D.C. 20006. \$4.25.)

Taken as a whole, these four papers by planning experts provide a solid grounding in the background, present state, goals, and problems of future-oriented planning. The point is made that the kind of planning discussed, "second-generation educational planning," is far different from, but does not exclude or ignore, "first-generation" planning.

By first-generation planning is meant long-range forecasting in quantifiable areas such as population growth, manpower needs, and the like. Second-generation planning involves fundamental, qualitative changes in the educational process. Rasp, Alfred, Jr., "Delphi: A Decision-Maker's Dream." Nation's Schools. 92, 1 (July 1973), pp. 29-32. EJ 079 292.

A good companion piece to the Debenham article, this is essentially a layman's guide to the Delphi technique. Not only does Rasp define Delphi and outline how it works, he discusses its limitations and raises some key questions an administrator might ask himself before choosing to use the technique. The testimony of two people who have used a version of the Delphi technique in their districts is appended.

Saylor, J. Galen, editor. *The School of the Future-Now.* Washington, D.C.: Council on Continuous Education, Association for Supervision and Curriculum Development, 1972, 136 pages. El) 072 534 MF \$0.75 HC not available from EDRS. (Available from Association for Supervision and Curriculum Development, 1701 K Street NW, Washington, D.C. 20006. Stock Number 611-17920, \$3.75.)

This is another set of "think" pieces from the Association for Supervision and Curriculum Development. These papers were given at a conference at which distinguished educators were asked to describe what "kinds of schools we need in the future NOW." Different educators give their views and recommendations of what education should be like for the young child, the middle years school pupil, the emerging adolescent, and the older adolescent. Also included are a critical analysis of the schools as they are now, a vision of the entire education process as it could be, and a view of curriculum planning as it should be.

Shane, Harold G. *The Educational Significance of the Future.* A Report Prepared for Sidney P. Marland, Jr., U.S. Commissioner of Education. 1972. 148 pages. ED 080 412 MF \$0.75 HC \$6.60.

Shane's work is a limited but important and informative attempt to survey the state of futures research in 1971-72 and to suggest how the Office of Education could use policy and futures research.

His report is significant as an "action picture" of futures research in 1971-72, introducing the researchers, their projects for the future, and their publications. A 400d starting point for someone who wants to dig deeper and wants to know who is doing futures research.

Weber, Robert E. "The Techniques of Futurology." Journal of Creative Behavior, 7, 3 (3rd Quarter 1973), pp. 153-160. El 087 167.

In this "appendix" to his earlier article, Weber outlines the basic techniques of futurology (including projection/extrapolation, expectancy conditioning, and policy formation) and suggests a way of initiating futurology efforts.

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Weber, Robert E. "Human Potential and the Year 2000: The Futures Project of the New Jersey Department of Education." *Journal of Creative Behavior*. 7, 2 (2nd Quarter 1973), pp. 133-151. EJ 081 797.

Not only does Weber explain the New Jersey futures project, he also provides a brief but solid grounding in the history and purposes of futurology. While admitting that the state of futurology is crude, Weber argues for its potential use in "slowing down the pace of various change, or accelerating the pace of desired change; avoiding unwelcome futures, or creating better alternate futures; optimizing the element of command and control over future conditions; and setting off warning alarms when threats loom on the horizon,"

Weber's discussion as well as the current crop of problems in education argue persuasively for educators to take a serious look at futurology.

Williams, Charles, and Nusberg, Charlotte. Anticipating Educational Issues over the Next Two Decades: An Overview Report of Trends Analysis. Research Memorandun. No. 18. Menlo Park, California: Educational Policy Research Center, Stanford Research Institute, 1973. 78 pages. ED 074 627 MF \$0.75 IIC \$4.20.

Addressed to the Office of Education, this research memorandum makes a case for the conceptual and methodological inadequacy of the present attempts to formulate educational policy. The dominant theme of the report is that major changes in education come from forces external to the educational system—social, economic, and political changes in the society. After examining anticipated changes in American society over the next two decades, Williams and Nusberg present four needed policy initiatives fo. the Office of Education,

This is essential reading, particularly in its description of the climate in which policy decisions are going to be made in the future.

Worth, Walter H., and others. A Choice of Futures. Edmonton, Alberta: Alberta Commission on Educational Planning, [1972]. 337 pages. ED 077 069 MF \$0.75 HC \$16.20. (Also available from Hurtig Publishers, 225 Birks Building, Edmonton, Alberta, Canada. \$6.00 plus mailing.)

This report is significant not only for what it says but also for the way the material was obtained and the way it is being disseminated. For all the years the Alberta Commission on Educational Planning investigated social, economic, and technological trends and made forecasts and recommendations for the province's next 20 years. As part of its research, the com-



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Research reports are announced in Resources in Education (RIE), available in many libraries and by subscription for \$38 a year from the United States Government Printing Office, Washington, D.C. 20402. Journal articles are announced in Current Index to Journals in Education. CIJE is also available in many libraries and can be ordered for \$44 a year from CCM Information Corporation, 866 Third Avenue, Room 1126, New York, New York 10022.

Besides processing documents and journal articles, the Clearinghouse prepares bibliographies, literature reviews, monographs, and other interpretive research studies on topics in its educational area.

This publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to the Association of California School Administrators for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either the Association of California School Administrators or the National Institute of Education.

EA 006 296

mission attempted to reach a sufficient number of people to establish what Albertans wanted to happen in these 20 years.

This book presents the commission's findings to the populace. The report is highly readable and is being offered for sale as a way to provide the people of the province with the information necessary for them to make informed choices about the kind of future Alberta should work for.

Ziegler, Warren L., and Marien, Michael M. An Approach to the Futures-Perspectives in American Education. New York: Syracuse University Research Corporation, 1970, 107 pages. ED 046 046 MF 50.75 HC 55,40.

This report is one of the best discussions of futurism: it has substance, is readable, and covers all the bases. The authors discuss what thinking about the future means and entails, synthesize the research in five models of the way the future is viewed, and discuss the tricky relationships among policy, planning, and polity.

The problems associated with futures work and policy, planning, and polity are critical because the purpose of futures research is to act to choose a future. Ziegler and Marien raise large questions such as what to do about divergence in opinion about desirable futures and the when, where, and how of intervention in affairs in order to create a particular future.





